

X-16757.ST25.txt
SEQUENCE LISTING

<110> Applied Molecular Evolution

<120> Fc Region Variants

<130> X-16757

<150> 60/535,764

<151> 2004-01-12

<160> 56

<170> PatentIn version 3.3

<210> 1

<211> 218

<212> PRT

<213> Human

<400> 1

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
1 5 10 15

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
20 25 30

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
35 40 45

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
50 55 60

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
65 70 75 80

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
85 90 95

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
100 105 110

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
115 120 125

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
130 135 140

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
145 150 155 160

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
165 170 175

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
Page 1

180 X-16757.ST25.txt 190
185

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
195 200 205

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215

<210> 2
<211> 217
<212> PRT
<213> Human

<400> 2

Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
20 25 30

Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Asn Trp Tyr
35 40 45

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Val His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln
100 105 110

Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met
115 120 125

Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro
130 135 140

Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn
145 150 155 160

Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu
165 170 175

Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val
180 185 190

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln
Page 2

Page 3

X-16757.ST25.txt

210

215

<210> 4
 <211> 218
 <212> PRT
 <213> Human

<400> 4

Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
 1 5 10 15

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 20 25 30

Val Val Val Asp Val Ser Gln Glu Asp Pro Glu Val Gln Phe Asn Trp
 35 40 45

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 50 55 60

Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 65 70 75 80

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 85 90 95

Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 100 105 110

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Gln Glu Glu
 115 120 125

Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 130 135 140

Pro Ser Asp Ile Ala Val Glu Trp Glx Ser Asn Gly Gln Pro Glu Asn
 145 150 155 160

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 165 170 175

Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp Gln Glu Gly Asn
 180 185 190

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 195 200 205

Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys
 210 215

<210> 5

X-16757.ST25.txt

<211> 215
 <212> PRT
 <213> Murine

<400> 5

Thr Val Pro Glu Val Ser Ser Val Phe Ile Phe Pro Pro Lys Pro Lys
 1 5 10 15
 Asp Val Leu Thr Ile Thr Leu Thr Pro Lys Val Thr Cys Val Val Val
 20 25 30
 Asp Ile Ser Lys Asp Asp Pro Glu Val Gln Phe Ser Trp Phe Val Asp
 35 40 45
 Asp Val Glu Val His Thr Ala Gln Thr Gln Pro Arg Glu Glu Gln Phe
 50 55 60
 Asn Ser Thr Phe Arg Ser Val Ser Glu Leu Pro Ile Met His Gln Asp
 65 70 75 80
 Cys Leu Asn Gly Lys Glu Phe Lys Cys Arg Val Asn Ser Ala Ala Phe
 85 90 95
 Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Arg Pro Lys
 100 105 110
 Ala Pro Gln Val Tyr Thr Ile Pro Pro Pro Lys Glu Gln Met Ala Lys
 115 120 125
 Asp Lys Val Ser Leu Thr Cys Met Ile Thr Asp Phe Phe Pro Glu Asp
 130 135 140
 Ile Thr Val Glu Trp Gln Trp Asn Gly Gln Pro Ala Glu Asn Tyr Lys
 145 150 155 160
 Asn Thr Gln Pro Ile Met Asp Thr Asp Gly Ser Tyr Phe Val Tyr Ser
 165 170 175
 Lys Leu Asn Val Gln Lys Ser Asn Trp Glu Ala Gly Asn Thr Phe Thr
 180 185 190
 Cys Ser Val Leu His Glu Gly Leu His Asn His His Thr Glu Lys Ser
 195 200 205
 Leu Ser His Ser Pro Gly Lys
 210 215

<210> 6
 <211> 218
 <212> PRT
 <213> Murine

X-16757.ST25.txt

<400> 6

Pro Ala Pro Asn Leu Leu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro
1 5 10 15

Lys Ile Lys Asp Val Leu Met Ile Ser Leu Ser Pro Ile Val Thr Cys
20 25 30

Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp
35 40 45

Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg
50 55 60

Glu Asp Tyr Asn Ser Thr Leu Arg Val Val Ser Ala Leu Pro Ile Gln
65 70 75 80

His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
85 90 95

Lys Asp Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly
100 105 110

Ser Val Arg Ala Pro Gln Val Tyr Val Leu Pro Pro Pro Glu Glu Glu
115 120 125

Met Thr Lys Lys Gln Val Thr Leu Thr Cys Met Val Thr Asp Phe Met
130 135 140

Pro Glu Asp Ile Tyr Val Glu Trp Thr Asn Asn Gly Lys Thr Glu Leu
145 150 155 160

Asn Tyr Lys Asn Thr Glu Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe
165 170 175

Met Tyr Ser Lys Leu Arg Val Glu Lys Lys Asn Trp Val Glu Arg Asn
180 185 190

Ser Tyr Ser Cys Ser Val Val His Glu Gly Leu His Asn His His Thr
195 200 205

Thr Lys Ser Phe Ser Arg Thr Pro Gly Lys
210 215

<210> 7

<211> 218

<212> PRT

<213> Murine

<400> 7

Pro Ala Pro Asn Leu Glu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro
1 5 10 15

X-16757.ST25.txt

Asn Ile Lys Asp Val Leu Met Ile Ser Leu Thr Pro Lys Val Thr Cys
 20 30
 Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val Gln Ile Ser Trp
 35 40 45
 Phe Val Asn Asn Val Glu Val His Thr Ala Gln Thr Gln Thr His Arg
 50 55 60
 Glu Asp Tyr Asn Ser Thr Ile Arg Val Val Ser His Leu Pro Ile Gln
 65 70 75 80
 His Gln Asp Trp Met Ser Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
 85 90 95
 Lys Asp Leu Pro Ser Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly
 100 105 110
 Leu Val Arg Ala Pro Gln Val Tyr Thr Leu Pro Pro Pro Ala Glu Gln
 115 120 125
 Leu Ser Arg Lys Asp Val Ser Leu Thr Cys Leu Val Val Gly Phe Asn
 130 135 140
 Pro Gly Asp Ile Ser Val Glu Trp Thr Ser Asn Gly His Thr Glu Glu
 145 150 155 160
 Asn Tyr Lys Asp Thr Ala Pro Val Leu Asp Ser Asp Gly Ser Tyr Phe
 165 170 175
 Ile Tyr Ser Lys Leu Asn Met Lys Thr Ser Lys Trp Glu Lys Thr Asp
 180 185 190
 Ser Phe Ser Cys Asn Val Arg His Glu Gly Leu Lys Asn Tyr Tyr Leu
 195 200 205
 Lys Lys Thr Ile Ser Arg Ser Pro Gly Lys
 210 215

<210> 8
 <211> 218
 <212> PRT
 <213> Murine

<400> 8

Pro Pro Gly Asn Ile Leu Gly Gly Pro Ser Val Phe Ile Phe Pro Pro
1 5 10 15

Lys Pro Lys Asp Ala Leu Met Ile Ser Leu Thr Pro Lys Val Thr Cys
20 25 30

X-16757.ST25.txt

Val Val Val Asp Val Ser Glu Asp Asp Pro Asp Val His Val Ser Trp
 35 40 45
 Phe Val Asp Asn Lys Glu Val His Thr Ala Trp Thr Gln Pro Arg Glu
 50 55 60
 Ala Gln Tyr Asn Ser Thr Phe Arg Val Val Ser Ala Leu Pro Ile Gln
 65 70 75 80
 His Gln Asp Trp Met Arg Gly Lys Glu Phe Lys Cys Lys Val Asn Asn
 85 90 95
 Lys Ala Leu Pro Ala Pro Ile Glu Arg Thr Ile Ser Lys Pro Lys Gly
 100 105 110
 Arg Ala Gln Thr Pro Gln Val Tyr Thr Ile Pro Pro Pro Arg Glu Gln
 115 120 125
 Met Ser Lys Lys Lys Val Ser Leu Thr Cys Leu Val Thr Asn Phe Phe
 130 135 140
 Ser Glu Ala Ile Ser Val Glu Trp Glu Arg Asn Gly Glu Leu Glu Gln
 145 150 155 160
 Asp Tyr Lys Asn Thr Pro Pro Ile Leu Asp Ser Asp Gly Thr Tyr Phe
 165 170 175
 Leu Tyr Ser Lys Leu Thr Val Asp Thr Asp Ser Trp Leu Gln Gly Glu
 180 185 190
 Ile Phe Thr Cys Ser Val Val His Glu Ala Leu His Asn His His Thr
 195 200 205
 Gln Lys Asn Leu Ser Arg Ser Pro Gly Lys
 210 215

<210> 9
 <211> 110
 <212> PRT
 <213> Human

<400> 9

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15
 Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val
 20 25 30
 Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr
 35 40 45

X-16757.ST25.txt

Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu
50 55 60

Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His
65 70 75 80

Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys
85 90 95

Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
100 105 110

<210> 10
<211> 107
<212> PRT
<213> Human

<400> 10

Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu
1 5 10 15

Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
20 25 30

Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
35 40 45

Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
50 55 60

Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
65 70 75 80

Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr
85 90 95

Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
100 105

<210> 11
<211> 330
<212> PRT
<213> Human

<400> 11

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
20 25 30

X-16757 . ST25.txt

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80
 Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95
 Arg Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110
 Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125
 Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140
 Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160
 Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175
 Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190
 His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205
 Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220
 Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu
 225 230 235 240
 Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255
 Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270
 Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285
 Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300

X-16757.ST25.txt

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 325 330

<210> 12
 <211> 330
 <212> PRT
 <213> Human

<400> 12

Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys
 1 5 10 15

Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr
 20 25 30

Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser
 35 40 45

Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser
 50 55 60

Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr
 65 70 75 80

Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys
 85 90 95

Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys
 100 105 110

Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro
 115 120 125

Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 130 135 140

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 145 150 155 160

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu
 165 170 175

Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu
 180 185 190

His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn
 195 200 205

X-16757.ST25.txt

Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly
 210 215 220

Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu
 225 230 235 240

Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr
 245 250 255

Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn
 260 265 270

Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe
 275 280 285

Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn
 290 295 300

Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr
 305 310 315 320

Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
 325 330

<210> 13
 <211> 31
 <212> PRT
 <213> Human

<400> 13

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

His Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 20 25 30

<210> 14
 <211> 31
 <212> PRT
 <213> Human

<400> 14

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

Ile Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 20 25 30

<210> 15
 <211> 31
 <212> PRT

X-16757.ST25.txt

<213> Human

<400> 15

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

Leu Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 20 25 30

<210> 16

<211> 31

<212> PRT

<213> Human

<400> 16

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

Pro Lys Asp Thr Phe Met Ile Ser Arg Thr Pro Glu Val Thr Cys
 20 25 30

<210> 17

<211> 31

<212> PRT

<213> Human

<400> 17

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Met Pro Glu Val Thr Cys
 20 25 30

<210> 18

<211> 31

<212> PRT

<213> Human

<400> 18

Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys
 1 5 10 15

Pro Lys Asp Thr Leu Met Ile Ser Arg Pro Pro Glu Val Thr Cys
 20 25 30

<210> 19

<211> 29

<212> PRT

<213> Human

<400> 19

Val Val Val Asp Val Ser Asp Glu Asp Pro Glu Val Lys Phe Asn Trp
 1 5 10 15

X-16757.ST25.txt

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
 20 25

<210> 20
 <211> 29
 <212> PRT
 <213> Human

<400> 20

Val Val Val Asp Val Ser Glu Glu Asp Pro Glu Val Lys Phe Asn Trp
 1 5 10 15

Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys
 20 25

<210> 21
 <211> 29
 <212> PRT
 <213> Human

<400> 21

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 1 5 10 15

Tyr Val Ala Gly Val Glu Val His Asn Ala Lys Thr Lys
 20 25

<210> 22
 <211> 29
 <212> PRT
 <213> Human

<400> 22

Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp
 1 5 10 15

Tyr Val Lys Gly Val Glu Val His Asn Ala Lys Thr Lys
 20 25

<210> 23
 <211> 30
 <212> PRT
 <213> Human

<400> 23

Cys Lys Val Ser Asn Lys Ala Leu Pro Lys Pro Ile Glu Lys Thr Ile
 1 5 10 15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 24
 <211> 30

X-16757.ST25.txt

<212> PRT
 <213> Human

<400> 24

Cys Lys Val Ser Asn Lys Ala Leu Pro Arg Pro Ile Glu Lys Thr Ile
 1 5 10 15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 25
 <211> 30
 <212> PRT
 <213> Human

<400> 25

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Asp Glu Lys Thr Ile
 1 5 10 15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 26
 <211> 30
 <212> PRT
 <213> Human

<400> 26

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Glu Glu Lys Thr Ile
 1 5 10 15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 27
 <211> 30
 <212> PRT
 <213> Human

<400> 27

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Lys Glu Lys Thr Ile
 1 5 10 15

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 28
 <211> 30
 <212> PRT
 <213> Human

<400> 28

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Arg Glu Lys Thr Ile
 1 5 10 15

X-16757.ST25.txt

Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 29
 <211> 30
 <212> PRT
 <213> Human

<400> 29

Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile
 1 5 10 15

Ser Lys Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr
 20 25 30

<210> 30
 <211> 22
 <212> PRT
 <213> Human

<400> 30

Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Asp Val Glu Trp Glu
 1 5 10 15

Ser Asn Gly Gln Pro Glu
 20

<210> 31
 <211> 23
 <212> PRT
 <213> Human

<400> 31

Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Tyr
 1 5 10 15

Leu Ser Leu Ser Pro Gly Lys
 20

<210> 32
 <211> 990
 <212> DNA
 <213> HUMAN

<400> 32

gcctccacca agggcccatc ggtcttcccc ctggcaccct cctccaagag cacctctggg	60
ggcacagcgg ccctgggctg cctgggtcaag gactacttcc ccgaaccggt gacgggtgtcg	120
tggaactcag gcgccctgac cagcggcgtg cacaccttcc cggctgtcct acagtcctca	180
ggactctact ccctcagcag cgtgggtgacc gtgccctcca gcagcttggg caccagacc	240
tacatctgca acgtgaatca caagcccagc aacaccaagg tggacaagaa ggttgagccc	300

X-16757.ST25.txt

```

aaatcttgtg acaaaactca cacatgccc ccgtgcccag cacctgaact cctgggggga 360
ccgtcagtct tcctcttccc cccaaaaccc aaggacaccc tcatgatctc ccggaccctt 420
gaggtcacat gcgtggtggt ggacgtgagc cacgaagacc ctgagggtcaa gttcaactgg 480
tacgtggacg gcgtggaggt gcataatgcc aagacaaagc cgcgggagga gcagtacaac 540
agcacgtacc gtgtggtcag cgtcctcacc gtcctgcacc aggactggct gaatggcaag 600
gagtacaagt gcaaggctct caacaaagcc ctcccagccc ccatcgagaa aaccatctcc 660
aaagccaaag ggcagccccg agaaccacag gtgtacaccc tgcccccatc ccgggacgag 720
ctgaccaaga accagggtcag cctgacctgc ctgggtcaaag gcttctatcc cagcgacatc 780
gccgtggagt gggagagcaa tgggcagccg gagaacaact acaagaccac gcctcccgtg 840
ctggactccg acggctcctt ctctcttat agcaagctca ccgtggacaa gagcagggtg 900
cagcagggga acgtcttctc atgctccgtg atgcatgagg ctctgcacaa ccactacacg 960
cagaagagcc tctccctgtc tccgggtaaa 990

```

<210> 33
<211> 93
<212> DNA
<213> HUMAN

```

<400> 33
gcacctgaac tcctgggggg accgtcagtc ttctctttcc ccccaaaacc caaggacacc 60
ctcatgatct cccggacccc tgaggtcaca tgc 93

```

<210> 34
<211> 87
<212> DNA
<213> HUMAN

```

<400> 34
gtggtggtgg acgtgagcca cgaagaccct gaggtcaagt tcaactggta cgtggacggc 60
gtggaggtgc ataatgccaa gacaaaag 87

```

<210> 35
<211> 90
<212> DNA
<213> HUMAN

```

<400> 35
tgcaaggctct ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaagccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

```

<210> 36
<211> 69
<212> DNA
<213> HUMAN

```

<400> 36
tgctccgtga tgcatgaggc tctgcacaa cactacacgc agaagagcct ctccctgtct 60
ccgggtaaa 69

```

X-16757.ST25.txt

<210> 37
 <211> 66
 <212> DNA
 <213> HUMAN

<400> 37
 tgcctggtca aaggcttcta tcccagcgac atcgccgtgg agtgggagag caatgggcag 60
 ccggag 66

<210> 38
 <211> 93
 <212> DNA
 <213> HUMAN

<400> 38
 gcacctgaac tcctgggggg accgtcagtc ttcctcttcc ccccaaaaca caaggacacc 60
 ctcatgatct cccggacccc tgaggtcaca tgc 93

<210> 39
 <211> 93
 <212> DNA
 <213> HUMAN

<400> 39
 gcacctgaac tcctgggggg accgtcagtc ttcctcttcc ccccaaaaat caaggacacc 60
 ctcatgatct cccggacccc tgaggtcaca tgc 93

<210> 40
 <211> 93
 <212> DNA
 <213> HUMAN

<400> 40
 gcacctgaac tcctgggggg accgtcagtc ttcctcttcc ccccaaaaact gaaggacacc 60
 ctcatgatct cccggacccc tgaggtcaca tgc 93

<210> 41
 <211> 93
 <212> DNA
 <213> HUMAN

<400> 41
 gcacctgaac tcctgggggg accgtcagtc ttcctcttcc ccccaaaaacc caaggacacc 60
 ttcatgatct cccggacccc tgaggtcaca tgc 93

<210> 42
 <211> 93
 <212> DNA
 <213> HUMAN

<400> 42
 gcacctgaac tcctgggggg accgtcagtc ttcctcttcc ccccaaaaacc caaggacacc 60
 ctcatgatct cccggatgcc tgaggtcaca tgc 93

X-16757.ST25.txt

<210> 43
 <211> 93
 <212> DNA
 <213> HUMAN

<400> 43
 gcacctgaac tcctgggggg accgtcagtc ttcctcttcc ccccaaaacc caaggacacc 60
 ctcatgatct cccggccacc tgaggtcaca tgc 93

<210> 44
 <211> 87
 <212> DNA
 <213> HUMAN

<400> 44
 gtggtggtgg acgtgagcga cgaagaccct gaggtcaagt tcaactggta cgtggacggc 60
 gtggaggtgc ataatgccaa gacaaag 87

<210> 45
 <211> 87
 <212> DNA
 <213> HUMAN

<400> 45
 gtggtggtgg acgtgagcga ggaagaccct gaggtcaagt tcaactggta cgtggacggc 60
 gtggaggtgc ataatgccaa gacaaag 87

<210> 46
 <211> 87
 <212> DNA
 <213> HUMAN

<400> 46
 gtggtggtgg acgtgagcca cgaagaccct gaggtcaagt tcaactggta cgtggccggc 60
 gtggaggtgc ataatgccaa gacaaag 87

<210> 47
 <211> 87
 <212> DNA
 <213> HUMAN

<400> 47
 gtggtggtgg acgtgagcca cgaagaccct gaggtcaagt tcaactggta cgtgaaaggc 60
 gtggaggtgc ataatgccaa gacaaag 87

<210> 48
 <211> 90
 <212> DNA
 <213> HUMAN

<400> 48
 tgcaaggtct ccaacaaagc cctcccaaaa cccatcgaga aaaccatctc caaagccaaa 60
 gggcagcccc gagaaccaca ggtgtacacc 90

X-16757.ST25.txt

<210> 49
<211> 90
<212> DNA
<213> HUMAN

<400> 49
tgcaaggtct ccaacaaagc cctcccacgc cccatcgaga aaaccatctc caaagccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

<210> 50
<211> 90
<212> DNA
<213> HUMAN

<400> 50
tgcaaggtct ccaacaaagc cctcccagcc cccgacgaga aaaccatctc caaagccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

<210> 51
<211> 90
<212> DNA
<213> HUMAN

<400> 51
tgcaaggtct ccaacaaagc cctcccagcc cccgaggaga aaaccatctc caaagccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

<210> 52
<211> 90
<212> DNA
<213> HUMAN

<400> 52
tgcaaggtct ccaacaaagc cctcccagcc cccaaagaga aaaccatctc caaagccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

<210> 53
<211> 90
<212> DNA
<213> HUMAN

<400> 53
tgcaaggtct ccaacaaagc cctcccagcc ccccgcgaga aaaccatctc caaagccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

<210> 54
<211> 90
<212> DNA
<213> HUMAN

<400> 54
tgcaaggtct ccaacaaagc cctcccagcc cccatcgaga aaaccatctc caaaacccaaa 60
gggcagcccc gagaaccaca ggtgtacacc 90

<210> 55

X-16757.ST25.txt

<211> 66
<212> DNA
<213> HUMAN

<400> 55
tgcctgggtca aaggcttcta tcccagcgc atcgacgtgg agtgggagag caatgggcag 60
ccggag 66

<210> 56
<211> 69
<212> DNA
<213> HUMAN

<400> 56
tgctccgtga tgcattgaggc tctgcacaac cactacacgc agaagtacct ctccctgtct 60
ccgggtaaa 69